

*The Multifrex*  
High-Frequency  
Instrument

*Manufactured by*  
AMOS M. CATO  
1815 West Fourteenth St.  
LITTLE ROCK, ARK.



## High Frequency Currents

PHYSICIANS have been using the High-Frequency current for many years and have accomplished wonderful results in cases of rheumatism, neuritis, scalp and skin diseases and in all cases where body treatments are necessary. In the Multifrex we have a modern instrument which does all the work of the large expensive machines, and eliminates all objectionable features.

The wonderful curative properties of the Violet-Rays lie in the fact that it generates extremely high voltage approximately 75,000 and about 350,000 oscillations per second. The volume is almost negligible, which fact makes the use of the instrument absolutely safe. The high oscillations produce what is known as a "Cellular Massage" which penetrates and exercises each cell in the body. As the oscillations are beyond the sense of feeling, the Multifrex treatment is both pleasant and beneficial as it produces no muscular contraction or unpleasant sensations of any sort. It is a luxurious electrical treatment. It has a sedative action on the body, aiding elimination, respiration, digestion, sleep, and cause a healthy flow of blood.

The ozone generated during a treatment is the greatest active germicidal agent known. This can also be inhaled, purifying the blood and relieving acute attacks of the respiratory organs.

The Multifrex is endorsed by all leading medical men and associations.

## Rheumatism and Uric Acid

THERE are two kinds of rheumatism—muscular and articular. Muscular rheumatism affects certain muscles and is called by special names such as lumbago, torticollis, etc. Articular rheumatism involves the joints and is also divided into several kinds—acute inflammatory, chronic arthritis, etc.



Rheumatism or Body  
Treatments

Nothing in medical therapeutics is more certain than the absolute relief to all forms of muscular rheumatism which can be decisively treated by the Violet Ray. Often the stiffness and pain from a new lumbago is banished in five or ten minutes. In a severe chronic case the first relief takes longest, and the second and third treatments take less time. Compared with other methods the curative effects of the Violet Ray treatments are obtained with exceeding quickness.

Articular rheumatism is not a primary disease of the joints, but is the effect upon them of a condition when the general functions of combustion and elimination are imperfectly carried on. In the whole range of difficult diseases few can be more greatly improved than

can articular rheumatism if in bad cases time is allowed. The whole state of the body calls for elimination and nutrition and for these actions no agent equals High-Frequency. No other agent is so safe and sure a pain reliever. No other agent can so well tone up the faulty functions and reduce the circulation of irritant products to a minimum. No other agent can do so much to restore the impaired energy of muscles.

The chief contributing cause of an excess of uric acid is over-eating with too little muscular exercise to burn up the amount of food. The nutritional disturbance which lies at the base of "uric acid" calls unmistakably for High-Frequency treatments, which is the only genuinely curative remedy. There are drug palliatives but no decisive drug cures.

### **Sciatica and Neuralgia**

Neuralgia means nerve pain and in its simplest form this pain is the "cry of the nerve for food." This implies that in all cases of neuralgia the nutrition is below par. This again means that the High-Frequency Current is the most active agent in feeding the filaments and cells.

Sciatica is a form of neuralgia with pain below the neck. The person who has sciatica wants relief, and wants it urgently and can usually get it from the Violet Ray. When it is used the pain of the irritable nerve ceases to

be felt, the effect is tonic and the limb gains strength; and in from five to fifteen minutes the patient is usually free from suffering and able to walk with energy and comfort for the time being. Relief from the first treatment may last but a short time, after which the pains return but with a lessening severity. Relief from the second treatment lasts longer and so on until relief is permanent.

### **Nervous Troubles**

All Americans have "nerves." Some even style the nervous tendency "Americanitis." It is caused by worry, business suspense, lack of regular sleep, impaired nutrition, excitement, too hurried eating, etc. The symptoms are muscular aches, pains, headaches, sleeplessness, dyspepsia, and nervous irritability. Your appetite is not so healthy, your back aches, you have dizzy spells when you stoop, your food does not digest, you are listless in fact you are breaking down.

When the nervous system is below par or out of order, there is a derangement of nervous functions. Strictly speaking neurasthenia is not a definite disease but a condition, and this condition is removed by Violet Ray treatments. It may be fairly said that no case of functional nervous disease of whatever variety is properly treated unless the administration of High-Frequency is prescribed. Whenever any person feels below par, the tonic action of Violet Rays should be sought.



## Insomnia

**A**DEQUATE and refreshing sleep is necessary to good health. Inability to sleep is a very troublesome symptom and one which no one should neglect. There is no substitute for sleep and the act of medicine cannot supply its lack. Dependency on drugs is dangerous, depressing, and has too often been fatal.

The power of the sedative action of the Violet Ray tends to tranquilize the central nervous system, equalize the circulation and restore the capacity to rest. The High-Frequency Current is Nature's true remedy and the Violet Ray is indispensable because it at once treats the disease and the patient. It attacks the symptom and imparts a constitutional benefit at the same time.

## Headaches

**A** HEADACHE is a symptom of some local or constitutional derangement and not a distinct disease. Few drugs are directly curative and some are paralyzers of the heart and some destroy the red blood corpuscles. The coal-tar "headache powders" are doing much to undermine the health of those who take to them frequently.

When High-Frequency removes pain it also builds up the forces of nutrition and general health. The most common use of the Violet Ray is the removal of headache, and in such a way as to leave the system normal and not "doped." Long-lasting relief is the rule, but some forms of pain return, and for these regular and persistent treatment is required.

## The Production of Ozone with Violet Rays



Ozone Treatments

WHENEVER an electric spark passes thru the air, Ozone is liberated. Ozone is known under the chemical symbol  $O_3$  and is a concentrated form of Oxygen.

Ozone increases the oxygenation of the blood and tissues and also increases the number of red blood corpuscles. Germs and toxins cannot exist in the presence of Ozone and are completely destroyed. Ozone is the most active oxydizing agent known.

Inhalations of Ozone are beneficial in all diseases in the same manner as pure air is desirable, but it is particularly beneficial in all diseases of the Respiratory Organs, including Tuberculosis, Infectious Diseases, and all conditions where there is imperfect oxidation and where tissue resistance is below par. An Ozone spray has been demonstrated to be healing in all forms of ulcers.



## Scalp Treatments with Violet Rays

(Dandruff, Falling Hair, Baldness, Itching  
Scalp, Etc.)

**I**T IS a well known fact that falling hair and baldness are due to the faulty action of the tiny nerves and blood vessels that each and every hair is supplied with. If good, rich blood, laden with the necessary nourishment, does not circulate to the hair, they are literally starved. Bacterial and Parasitic germs get a foothold, causing the dandruff, the hair falls out, and baldness is the ultimate result.

The Violet Ray applied to the scalp virtually exercises each and every hair, encouraging it to new life and vitality. It has a direct action on the tiny nerves and blood vessels stimulating them to perform their proper functions of distributing necessary food supply to the hair. Also the Ozone which is generated acts as a germicidal agent and destroys any organism present, making dandruff impossible.

Women rarely suffer from total loss of hair. Frequently, on account of circulatory derangements, her hair loses its natural gloss and vigor and becomes dry and brittle, the ends split, and the hair falls out. The cause of such an unfortunate condition can easily be removed by a little timely assistance of nature.

## Facial Treatments

(For General Massage, Pimples, Blackheads, Eczema, or Any Skin Disease.)

**F**EW people realize how important it is to give the skin intelligent care and proper treatment. Few know how much the health and general comfort of the body is dependent upon the proper performance of the functions of the skin. The skin is a blood purifying organ and it is vitally necessary to keep it in perfect condition and normally active.

Violet-Ray treatments not only arouse the circulation on the surface of the skin, but cause a "cellular massage." In this way it reaches the deep inner blood and lymph vessels that course thru and between the muscles and tissues deep within the body; and right here is its greatest value for these are the ones that feed the surface tissues, and that bring new and lasting life to the skin.



Violet Rays have a soothing effect upon the entire nerve system.

## No Shock, No Pain



Violet Rays harmless—even to infants. There is no shock or pain.

ABOVE all, the strangest phenomena is the complete absence of pain of any sort during a VIOLET RAY treatment. The absence of pain is due to the inability of the sensory nerves to comprehend the very rapid

vibrations produced by the High-Frequency Current, just as we have vibrations that cannot be recognized by the auditory nerves as sound, or by the eyes as light.

Discard the crude idea that "shocks" have the slightest relation to the medicinal action of electricity.

"Shocks" of any nature are impossible with the Violet Ray and it can be used with the utmost safety on infants as well as adults.

The capabilities and energy manifest in the above phenomena have their most useful application in the treatment of diseases in which the nutrition of the body needs to be improved, the nervous system reinvigorated, and the physiological functions made to perform their duties. Violet Ray treatments are exceedingly agreeable and go far to turn electrical treatments into a luxury.



Violet Rays are used by physicians throughout the country with remarkable success.

## Condensed Directions for Surface Treatments

ASTHMA—Use No. 2 Electrode A 8 and No. 5 Electrode A 7. Also Ozone inhalations with Electrode No. 28 described on page 32.

BOILS—Electrode No. 18 on B 7 or wherever they appear.

BRAIN FAG—Electrode No. 1 on eyes, back of head and neck, and down spine. Ozone generator No. 28 should also be used.

BRONCHITIS—Electrode No. 2 on A 8 and B 8 until reddening is produced. Ozone inhalations with Electrode No. 28 should be used with each treatment.

CATARH (NASAL)—Electrode No. 1 in region of nose. Inhalations with Ozone generator No. 28.

COLD EXTREMITIES—No. 1 Electrode on parts affected, then Electrode No. 4 to spine and No. 1 on A 13.

COLD IN HEAD—Electrode No. 1 over nose, above eyes and sides of face. Internal nasal treatments with Electrode No. 11. Ozone inhalations with Electrode No. 28.

COLDS IN LUNGS—Electrode No. 1 or No. 2 on A 8 and B 8. Also Ozone inhalations with Electrode No. 28.

CONSTIPATION—Electrode No. 1 or No. 2 at A 13 and A 15.

DANDRUFF—Electrode No. 3 on scalp.

DEAFNESS AND EARACHE—Electrode No. 1 and No. 11 to ear.

DYSPEPSIA—Electrode No. 1 or No. 2 at A 10 and A 13.

ECZEMA—Apply Electrode No. 1 thru handkerchief or gauze to produce a short spark.

EYE DISEASE—Electrode No. 18 over closed eye.

FALLING HAIR (ALOPECIA)—Electrode No. 3 on scalp.

HAY FEVER—Electrode No. 1 on spine over nose and inhalations with Ozone generator No. 28.

HEADACHES—Details given on page 7.

INSOMNIA—Electrode No. 1 at B 7, A 7 and eyes.

INFLUENZA—Electrode No. 1 or No. 2 over spine, over eyes and sides of nose. Electrode No. 11 nostrils. Inhalations with No. 28.

GOITRE—Electrode No. 5 at A 7.

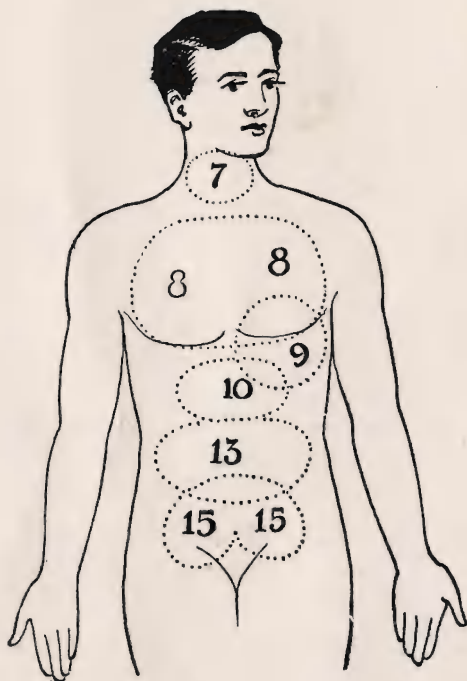
LUMBAGO—Electrode No. 2 with short spark over painful area.

MASSAGE—Allow patient to hold Electrode No. 6 and operator or masseur turns on current. Masseurs fingers or No. 1 Electrode will draw current to any part of body.

NERVOUSNESS—Electrode No. 1 over spine and at A 7, B 7 and A 13. Results should be immediate.

NEURALGIA—Electrode No. 1 or No. 2 to seat of pain with short spark or thru clothing.

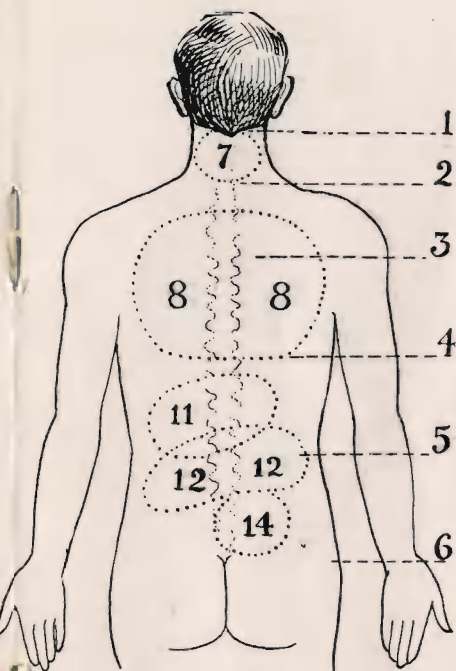
NEURITIS—Electrode No. 1 to seat of pain.



1. Base of Brain.
2. Center of Neck.
3. Middle of Shoulder.
4. Middle of Back.
5. Hips.

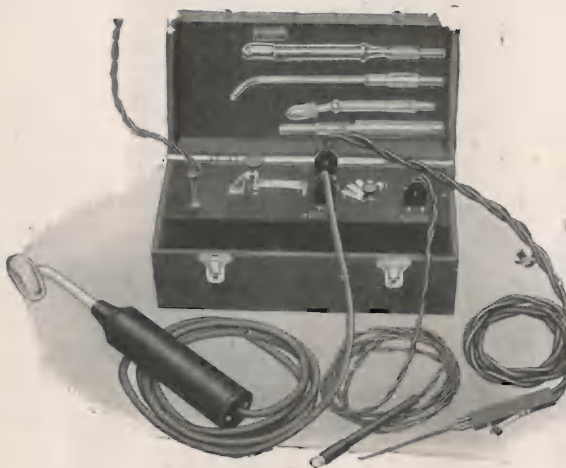
6. End
7. Neck
8. Lung
9. Hear
10. Ston





of Spine.  
 and Throat.  
 gs.  
 art.  
 mach.

- 11. Liver.
- 12. Kidneys.
- 13. Bowels.
- 14. Spleen.
- 15. Loins.



**The Multifrex  
Type A-1**

**Price, \$65.00.**

FOR the last six years High-Frequency generators of whatever nature or design, have shown no revolutionizing improvements. It was left to our many years of experience, study and consultation with prominent electro-therapeutists to produce the Multifrex.

Special attention has been given to the different High-Tension discharges. By special and unique arrangement of capacities, windings, and resistances, the standard electric current of 110 volts A. C. or D. C. is transformed to a great variety of high-pressure currents at varying frequencies. Since the science of High-Frequency has become of such importance a certain classification of the different High-Frequency discharges which vary in wave-form, pressure and volume was made. This formed a period of extensive and elaborate experimenting from which emerged the Multifrex.

**High-Frequency Currents:** The vibrating spark-gap allows a great range of current intensity. A selective switch allows the production of three separate and distinct forms of High-Frequency current. On the first step a pleasing mild flow can be obtained. This form of current is especially suitable for eye, ear, nose and throat work. On the second step a powerful stimulating spark is produced, suitable for Lumbago, Partial Paralysis, Rheumatism, etc.

**Multi-Frequency Currents:** On the third step Multi-Frequency currents are produced which cause a Faradic sensation in combination with High-Frequency. This can be varied from slight to strong muscular contraction. These Psuedo-Faradic Unipolar discharges are of the utmost importance in treating Partial Paralysis, Chronic Muscular Rheumatism and causing reflex action by spinal application. They are a profound stimulant to circulation, elimination and secretion.

Owing to the High-Frequency oscillation carrying the motor-waves, this form of electric current possesses great advantages over either the simple High-Frequency or plain induced Faradic current. It finds its application as a substitute for massage, (High-Frequency oscillation causes a "cellular massage") as an aid in the absorption of exudates resulting from fractures, sprains, in the relief of acute rheumatism, neuralgic pains, etc.

The Multi-Frequency current is a new modality and is not contained in any other instrument. When stubborn cases do not yield with High-Frequency alone, this combination opens up a new field for treatment which in numerous cases has produced wholly unexpected and gratifying results.

**T**HE High-Frequency handle is also an added feature. By placing a long tesla coil in the specially molded hard rubber handle, no unexpected spark can jump from the cord or any part of the handle. The contact-socket in which the electrode fits is embedded in solid hard rubber, therefore eliminating any exposed metal parts which might produce sparks.

**Cautery and Diagnostic Attachments:** Besides the various forms of High-Frequency currents which the Multifrex produces, it is equipped with Cautery and Diagnostic attachments.

**Cautery:** The Cautery attachment is composed of a Cautery handle of our own design, a platinum knife, and special heavy gauge reinforced wire. The Cautery handle is equipped with a thumb switch and the heat of the knife is regulated by means of the adjusting screw and can be heated from a cherry red incandescence to white heat. The results obtained with this attachment are of equal value to the expensive cautery transformer selling in itself for \$30.00 or more. It is employed in the removal of diseased growths from various parts of the body.

**Diagnostic Lamp:** The light for the Diagnostic Lamp is produced by means of a special resistance unit separate from the other mechanism, thereby effecting a steady bright white light with no flicker whatsoever.

**Description:** By exercising great mechanical ingenuity the entire outfit has been made to occupy about half the space of other box-type machines. It measures only 12½"x6½"x6½" and weighs 7 pounds fully equipped with all attachments. The entire outfit is contained in a heavy caratol covered case, handsomely lined with purple velvet. All metal parts are nickel-plated, the entire outfit being very elaborate in appearance.

With the three capacities of the High-Frequency current, the Cautery and the Diagnostic Attachments, the Multifrex covers a wide range of usefulness and makes a very valuable asset. It is superior and different in design, efficiency and reliability. It embodies in a very compact form the advantages of very expensive apparatus.

We present the Multifrex, a most perfect fool-proof apparatus, giving a dependable and safe machine which has proven its success and demonstrated its great value in bringing quick results in all cases where High-Frequency in its different phases can and should be used.

**Equipment:** The following electrodes and attachments comprise the equipment of a Multifrex apparatus:

- 1 Body Electrode.
- 1 Insulated Prostatic Electrode for rectal and vaginal treatments.
- 1 Insulated Urethral Electrode for bladder, ear, nose and throat.
- 1 Fulgeration Electrode.
- 1 Metal Handle for indirect treatment.
- 1 Hard Rubber High-Frequency Handle.
- 1 Cautery attachment complete with platinum knife.
- 1 Diagnostic attachment complete including lamp.

All contained in a handsome carrying case. Cautery and Diagnostic but including one body.



**The Multifrex High-Frequency  
Apparatus—Type B**

Same as Type A 1 but without cautery or diagnostic attachments and with but one electrode No. 1.

**Price, \$45.00.**

Price, \$45.00.





## De Luxe Outfit

**I**N appearance it is very elaborate, the coils being contained in a highly polished wood box, either mahogany or white enamel approximately 6x5x4½" high. The plate upon which the adjustment is mounted is of pure marble, all metal parts being highly nickeled.

The handle in which the tesla coil is contained is of polished hard rubber 7¾" long and 1¾" in diameter, very neat and easily held with 7 feet of reinforced cord. On the end of this cord is a special plug of our own manufacture, which fits snugly on the two posts on the marble plate.

*This is one of the distinguishing features of this two piece machine for the handle is detachable and prevents the breaking of the cord which is a common occurrence on two piece machines which have the cord permanently attached to the mechanism.*

Seven feet of silk twisted cord is furnished upon one end of which is a standard plug to connect to the line or any electric light socket; on the other end is connected our special plug which also fits upon the two posts on the marble plate. No cords therefore are permanently attached to the instrument proper as they are all detachable. This greatly eliminates the wear and tear on the cords, but if worn after a period of years, can easily be replaced without disturbing the instrument.

The sturdy adjustment on the marble instrument plate is foolproof in construction and the heavy sterling silver contact points will last indefinitely. It is also equipped with a special heavy duty condenser, preventing rapid heating.



#### **Violetta Physicians Outfit No. 4**

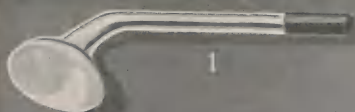
110 Volts A. C. or D. C.....	Price, \$34.25
220 Volts A. C. or D. C.....	Price, \$35.75
32 Volts .....	Price, \$35.75

## Outfit No. 4 for Physicians

THIS outfit is considered as very practical for the physicians use. The cautery electrode No. 20 for the fulgeration of warts, moles, etc. The urethral electrode No. 17 can also be used for the ear and nose. The metal electrode No. 6 besides its use for general tonic effects is used to make a contact with the urethral, vaginal, or rectal electrodes after these have been inserted. In using these three electrodes as well as any other electrode for orificial use, it is not necessary to insert into the instrument, but first insert into the orifice, attach the metal electrode No. 6 into the machine and make contact with it to the metal cap of the glass electrode. This method is regarded as most convenient for this form of treatment since the machine does not have to be held rigid when giving such treatment and prevents any unpleasant sensations whatsoever to the patient.

It is for these reasons that this one piece machine is preferred by physicians over other makes and because, the adjustment being in the handle it makes it unnecessary for him to leave his patient during a treatment.

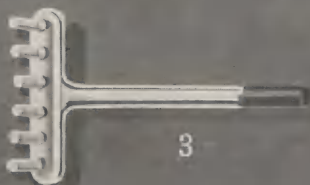
The entire outfit as described above is enclosed in a satin lined, caratol covered carrying case.



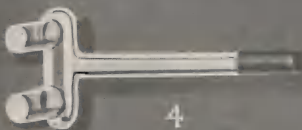
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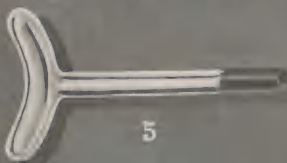
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## Violet Ray Electrodes

No. 1 General Electrode.—Used for facial and body treatments, and for any surface application. This electrode has a leading-in wire preventing the current from heating the surface of the electrode thereby causing it to break readily. With the leading-in wire this electrode will outlast other electrodes many times over. **Price, \$1.00.**

No. 2 Condensed Electrode.—As the name implies, it condenses the current, and produces a strong even flow; also generating electrical heat which is very desirable in deep seated cases. Used for Rheumatism, Lumbago, Neuritis, Neurasthenia Skin Diseases, Etc. This Electrode can be used in place of the No. 1 or No. 6. **Price, \$3.50.**

No. 3 Comb-Rake Electrode.—Used for all scalp treatments; Falling Hair, Dandruff, Gray Hair, and for stimulating the hair cells. **Price, \$2.50.**

No. 4 Spinal Electrode.—For all Spinal treatments. Arranged so that it fits over both sides of the vertebrae. For Reflex Spinal action, use the Metal Spinal Electrode No. 30. **Price, \$2.00.**

No. 5 Throat Electrode.—Designed so as to fit over the neck. Very excellent results have been accomplished with this electrode in Goitre, Tonsils, Double Chin. Any excessive formation is eliminated. **Price, \$2.00.**

No. 6 Metal Electrode.—This delivers a strong current and is excellent for general tonic and where constitutional effects are desired. When held by the patient, there is no muscular contractions, merely a sense of warmth and glowing permeating the entire body. The current can also be drawn to any part of the body by using the No. 1 electrode or the fingers of the operator. **Price, \$1.25.**



No. 30 Special Metal Electrode for Reflex Action.—In order to stimulate any muscle or nerve, place this Electrode in contact and then turn on the current, thus avoiding the spark. The organs or muscles can be made to respond as to direct treatment. Used mostly for stimulating the nerve centers at the Spine. **Price, \$1.75.**

INSULATED ELECTRODES



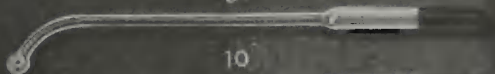
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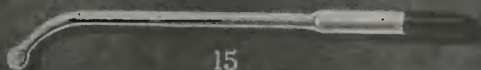
PLAIN ELECTRODES



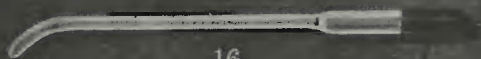
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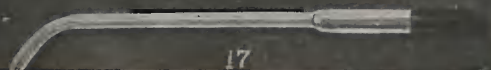
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17



*The advantage of insulated tubes is the fact that the current may be introduced without loss into the orifice of the body. In using a plain electrode for an orifice, much of the current is lost at the first point of contact. For instance if the prostatic gland is being treated with the plain electrode, much of the current is drawn off at the opening of the rectum, but if the insulated tube No. 9, is used, the current is conveyed to the desired point without loss of current.*

*Electrodes should always be inserted before current is turned on, and turned off before tube is removed.*

No. 7 Special Vaginal Electrode.—Made with perforations so that ozone may be generated within the vagina. Used for ovaritis, leucorrhea, vaginitis and all pelvic inflammations. **Price, \$3.00.**

No. 8 Vaginal Electrode (without perforations). **Price, \$2.00.**

No. 9 Prostatic Electrode.—Designed so that it fits directly over the prostatic gland. In many cases this electrode can also be used for vaginal work in place of No. 8. **Price, \$2.00.**

No. 10 Internal Throat Electrode.—Used for tonsilitis, hypertrophy of the tonsil, ulcers of the tonsil, etc. **Price, \$2.00.**

No. 11 Nasal and Ear Electrode.—Used for rhinitis, nasal catarrh, etc. Same electrode can be used for uterine work. **Price, \$2.00.**

No. 12 Urethral Electrode.—Used for cystitis, strictures, gonorrhea, etc. **Price, \$2.00.**

#### PLAIN ELECTRODES

No. 13 Vaginal Electrode. **Price, \$1.00.**

No. 14 Rectal Electrode. **Price, \$1.00.**

No. 15 Throat Electrode. **Price, \$1.00.**

No. 16 Nasal Electrode. **Price, \$1.00.**

No. 17 Urethral Electrode. **Price, \$1.00.**

## Ozone Generator

No. 28 Ozone Generator—This instrument when used with the Violet Ray generates enormous quantities of Ozone which is purified by passing thru the inhalant mixture provided with this instrument. The inhalant

is poured into the receptacle, and when the rubber bulb is agitated, the Ozone bubbles thru this mixture and is inhaled in the form of a vapor.



When using the Ozone Generator, support the Violet Ray on a table so that it will not roll and insert the Ozone Generator the same as any other electrode. The hand must be in contact with the glass stem of the Ozone Generator as in the illustration on page 12.

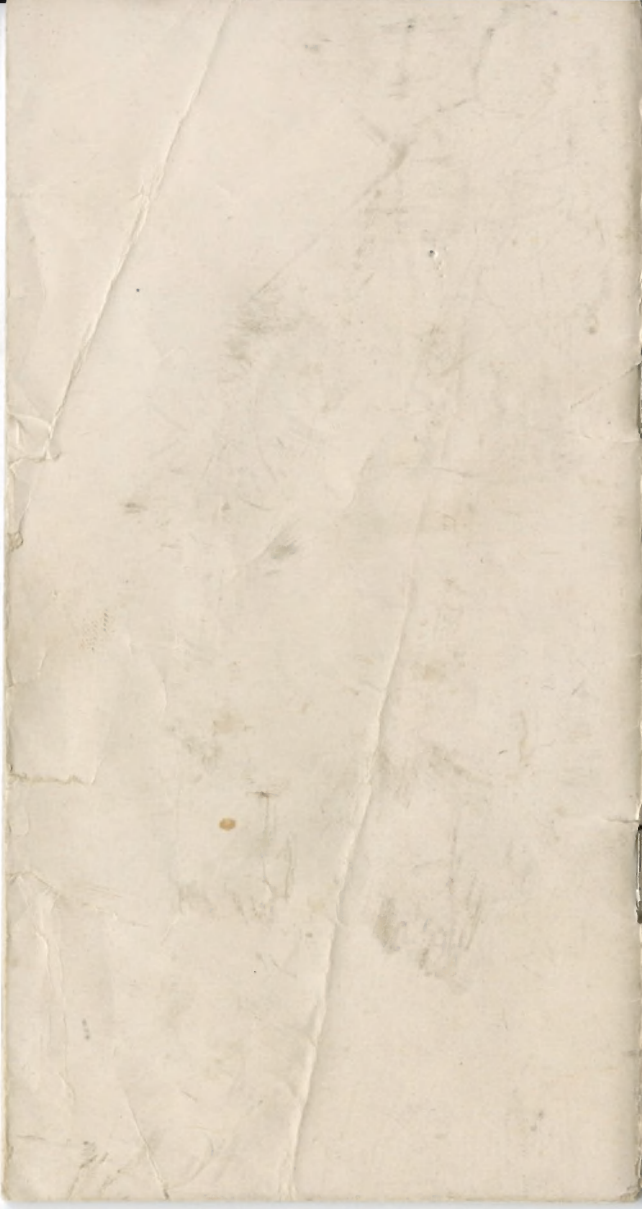
The Ozone permeates every cell in the lungs, destroying any germ life and soothing

the inflamed tissues. For Anemia, Hay Fever, Coughs, Catarrh, Asthma, Bronchitis, Insomnia, Nervous Debility and Tuberculosis of the Lungs, there is no better treatment.

The treatments are exceedingly agreeable and reminds one of a trip to the pine woods.

**Price, \$10.00.**





AMOS M. CATO

LITTLE ROCK

ARKANSAS

I) - mild - eye, ear, nose, throat

II) - nonefull - Lumbago, Rheumatism,  
partial paralysis

III) - partial paralysis, chronic muscu-  
lar Rheumatism - profound stima-  
lant to circulation - eliminative -  
reaction (19)

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